**Pulled From The Past Biodiversity & Natural Selection**

4.2.3 Discuss current estimates of numbers of species and past and present rates of species extinction  
  
4.1.1 Define the terms biodiversity, genetic diversity, species diversity, and habitat diversity  
  
2.3.4 Define the term diversity  
  
4.1.4 Explain how plate activity has influences evolution and biodiversity  
  
4.1.2 Outline the mechanism of natural selection as a possible driving force for speciation  
  
4.1.3 State that isolation can lead to different species being produced that are unable to interbreed to yield fertile offspring  
  
4.2.1 Identify factors that lead to loss of diversity  
  
4.2.4 Describe and explain the factors that may make species more or less prone to extinction  
  
4.2.6 Describe the case histories of three different species: one that has become extinct, another that is critically endangered, and a third species whose conservation status has been improved by intervention

🡪Define species diversity, species richness, biodiversity, genetic diversity, species diversity, habitat diversity

🡪Interpret data over biodiversity and endangered species

🡪Define extinct, endangered, threatened species

🡪Know named examples of endangered and extinct (since 1800) species. Explain the causes of their situation and anything being done to protect the species

🡪Define endemic species

🡪For a named example of an endangered species, hypothesize what would happen (at least three consequences) if that organism becomes extinct

🡪What are the relationships between species, habitat, and genetic diversity

🡪Explain allopatric and sympatric speciation. Give examples of each.

🡪Explain the three types of selection, draw graphs for each, and give examples of each

🡪Explain how mass extinction is often followed by a dramatic increase in biodiversity

🡪Define background and mass extinction

🡪What are two historic causes of mass extinction?

🡪What are five factors that can make a species more prone to extinction?

🡪What are the characteristics of a K selected species? A R-selected species?

🡪How does natural selection lead to an increase in species diversity?

🡪How does succession impact biodiversity? (species, habitat diversity)

🡪Compare modern extinctions to past extinctions

🡪Describe how natural selection leads to the development of a new species

🡪State three natural factors that may lead to loss of biodiversity

🡪State three anthropogenic causes that may leads to loss of biodiversity

🡪Explain how tectonic plate movement impacts biodiversity

🡪Define speciation

🡪Explain how geographic isolation can lead to altered characteristics of a species

🡪 Of the three types of biodiversity, which would have the greatest impact if it were to decrease?

🡪Why are tropical rainforest such hotbeds of biodiversity?

🡪What are characteristics of an ecosystem that would allow it to support high rates of biodiversity?

🡪What are actions a human can take to protect species diversity?

🡪Give one way that data regarding extinct species is calculated

🡪Describe the relationship between biodiversity and “increasing fragility” in an ecosystem

🡪State the evidence for mass extinctions of the past and outline possible causes

🡪Define adaptation

🡪Explain why some locations have high rates of endemic organisms

🡪Define Keystone Species and give a named example